Organic electroluminescent device comprises a substrate, a searing member enclosing an organic electroluminescent structure, and a mixture of a desiccant and an organic compound disposed on the inside surface of the sealing member

Patent Assignee: TDK CORP (DENK )

Inventor: EBISAWA A; ENDO H; HAYAKAWA T; KAWASHIMA M; ONITSUKA O

Number of Countries: 026 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week EP 1014757 A2 20000628 EP 99310599 19991224 200035 B Α JP 2000195661 A 20000714 JP 98370280 Α 19981225 200039

Priority Applications (No Type Date): JP 98370280 A 19981225

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1014757 A2 E 10 H05B-033/04

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI JP 2000195661 A 10 H05B-033/04

Abstract (Basic): EP 1014757 A2

NOVELTY - An organic electroluminescent device comprises a substrate, an organic electroluminescent structure formed on the substrate, and a sealing member enclosing the above structure. A mixture of a desiccant and an organic compound having a melting point of 70-200 degreesC is disposed on the inside surface of the sealing member.

USE - Organic electroluminescent device, sealing member for enclosing an organic electroluminescent structure.

ADVANTAGE — Deterioration with time of the device including a reduction of luminance with the lapse of driving time and the development and growth of dark spots are suppressed, the device initial performance is maintained over a long period of time, and the device can be manufactured through simple sealing steps at low cost.

DESCRIPTION OF DRAWING(S) — The drawing shows a cross-sectional view of an organic EL device of the invention.

Substrate (1)

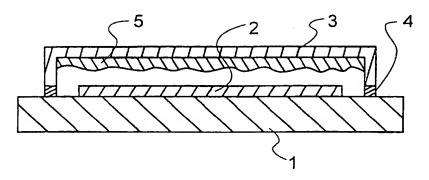
Organic electroluminescent device (2)

Sealing member (3)

Adhesive (4)

Mixture of a desiccant and an organic compound (5)

pp: 10 DwgNo 1/1



Title Terms: ORGANIC; ELECTROLUMINESCENT; DEVICE; COMPRISE; SUBSTRATE; SEAL

; MEMBER; ENCLOSE; ORGANIC; ELECTROLUMINESCENT; STRUCTURE; MIXTURE DESICCATE: ORGANIC: COMPOUND: DISPOSABLE; SURFACE; SEAL; MEMBER

Derwent Class: L03; U14; X26

International Patent Class (Main): H05B-033/04

International Patent Class (Additional): H05B-033/14

File Segment: CPI; EPI

Manual Codes (CPI/A-N): L03-C04

Manual Codes (EPI/S-X): U14-J02B; X26-J

WPI Acc No: 2000-658262/ 200064

XRAM Acc No: C00-199315 XRPX Acc No: N00-488059

Organic electroluminescent element for display, has water absorbing layer of preset thickness fixed internal periphery of container portion which

is sealed to internal periphery of substrate Patent Assignee: FUTABA DENSHI KOGYO KK (FUTK ) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 2000195662 A 20000714 JP 98373537 A 19981228 200064 B

Priority Applications (No Type Date): JP 98373537 A 19981228

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2000195662 A 6 H05B-033/04

Abstract (Basic): JP 2000195662 A

NOVELTY - A container portion (9) is sealed to internal periphery of substrate (2), thus covering organic layer (4). A water absorbing layer (13) of preset thickness, is fixed to internal periphery of the container portion.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacturing method of organic EL element.

USE - For display purpose.

ADVANTAGE — Quantity of water absorbing material of water absorbing layer is comparatively increased, hence dark spot occurrence near container portion and sealing portion of substrate is suppressed. Since light emission area is not almost reduced, raise in voltage resulting from non-light emission area, is suppressed, hence gain of power consumption is decreased.

DESCRIPTION OF DRAWING(S) - The figure shows sectional view of the organic EL element.

Substrate (2)

Organic layer (4)

Container portion (9)

Water absorbing layer (13)

pp: 6 DwgNo 1/3